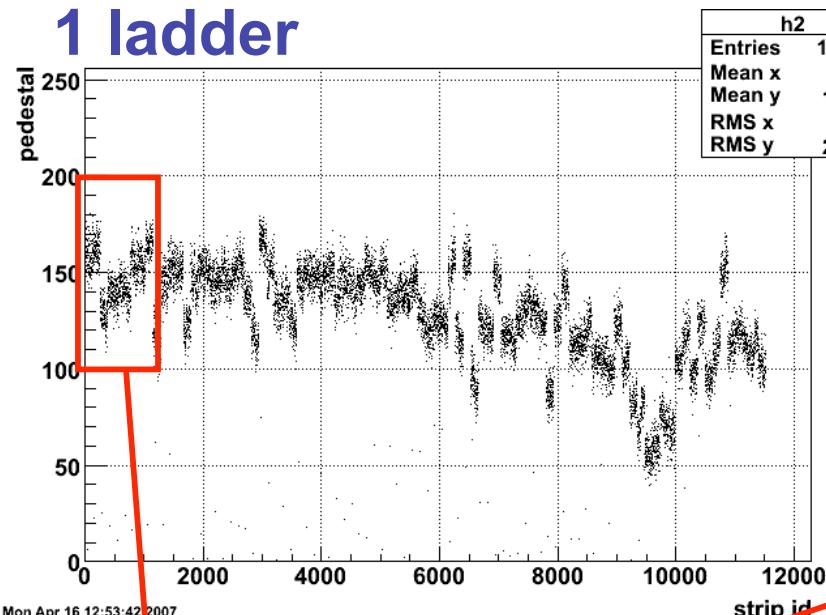


Suggestions to decrease the ssdStripCalib size

- Size of 1 table : 491520 entries * 3 fields
 - Field ={id,pedestal,noise}[long,octet,octet]
 - 1 ladder = 12288 strips
 - 1 wafer = 768 strips
 - 1 chip = 128 strips
- a) Write only 1 value per chip.
 - b) Write only the noise.
 - c) Last proposal

Method a)

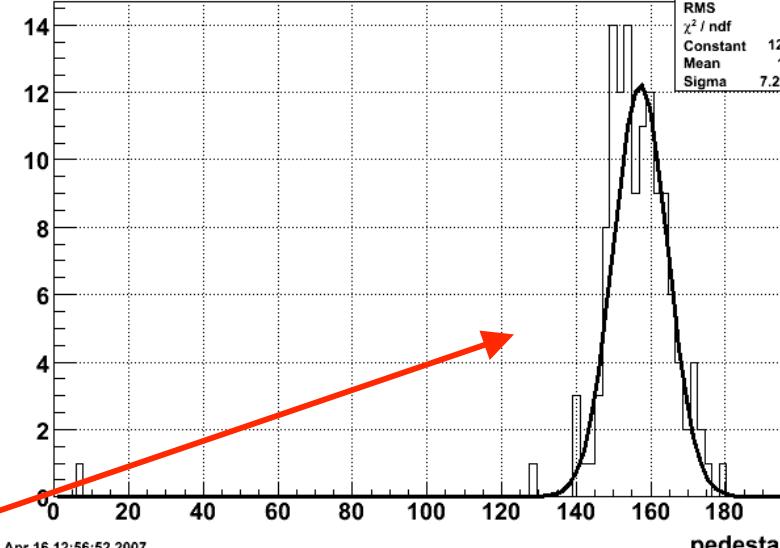
1 ladder



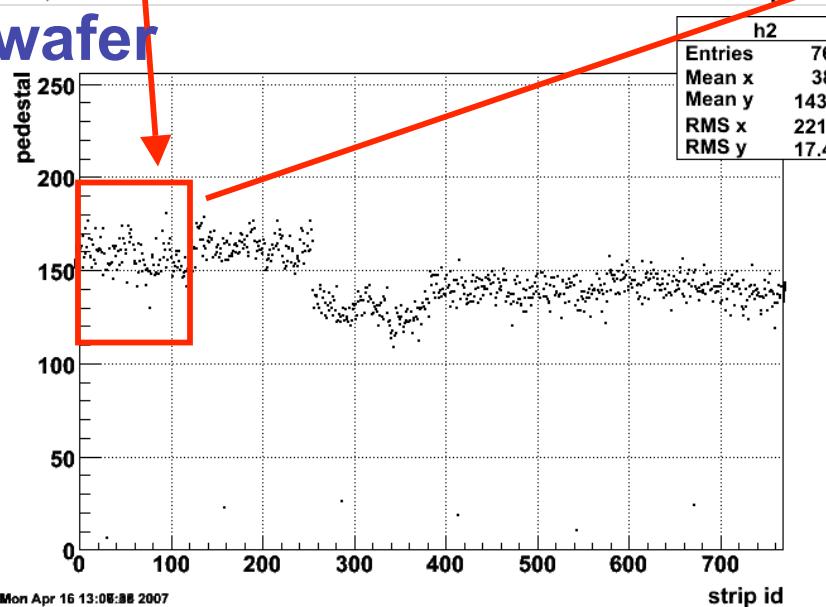
pedestal {ladder==2 && side==1 && chip==1 && wafer==1}

1 chip

htemp	
Entries	128
Mean	155.4
RMS	15.55
χ^2 / ndf	15.57 / 19
Constant	12.23 ± 1.53
Mean	157.2 ± 0.7
Sigma	7.256 ± 0.634



1 wafer



- Fit the noise&pedestal and set this mean for all the strips in this chip.
- $491520 \rightarrow 491520/128 = 3840$
- Pros : decrease a lot the size.
- Cons : loss of granularity, confidence in the fit.

Method b)

- Write only the noise.
- Still 491520 entries but only 2 fields.
- Pros : keep the granularity.
- Cons : pedestal not used in real data but in simulation when the pedestal subtraction is done.
-->something has to be found in this case.

Method c)

```
• /* ssdNoise.idl
• * Table: ssdNoise
• * description: SSD noise
• */
• struct ssdNoise {
•     float rms[320][1536];
    /* the first column is : NumberofLadders * NumberofWafersPerLadder = 20 * 16 */
•     /* the second column is : NumberofStripsPerWafers * NumberofSide  = 768 *2 */
• };

```

- In this table, I don't write anymore the pedestal and remove the id_strip but it still a combination of ladder id, wafer id, side.